

## **Remarks**

### Interview Summary/Examiners Amendment

Applicants very much appreciated the examiner's time during the telephonic interview of April 17, 2003 between Patent Counsel and Examiner Zakiya N. Walker. Applicants further appreciated the examiner's efforts in entering an Examiner's amendment in order to place the application in a condition for allowance. However, Applicants were disappointed and amazed that this condition for allowance was withdrawn and respectfully ask that this withdrawal be itself withdrawn based on the discussion herein below.

Applicants respectively confirm the substance of the interview as set out in the Interview Summary attached to the Office Action dated 4/29/03. In accordance with the revised format for Amendments, Applicants have amended claim 57, in accord with the Examiner's amendment, which was attached to the Office Action dated 4/29/03, and have listed the status of this claim as "currently amended". Applicants further amended claim 57 for purposes of clarification. Specifically, Applicants added the term "inner" to define the tubular member extending through the plurality of flapper valves, therefore, using consistent terms. Applicants also removed the terms "plurality of flapper valves" (claim 57, lines 8-9) and added "inner tubular" since before removing the inner tubular, the flapper valves are being held open and the actual flow is through the inner tubular. Further, Applicants have also amended the abstract showing the changes in accord with the Examiner's amendment, discussed herein above.

### Claim Objections

Claims 22-25 are objected to for the informality of omitting a clarifying term. The particular term, in claim 22, has been added in accord with the examiner's suggestions. It is thus submitted that claims 22-25 now stand in formal condition for allowance.

Claim Rejections – 35USC § 112

Claim 16 stands rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the examiner points out that there is insufficient antecedent basis for the limitation “said one or more valve seats”. Applicants appreciate the examiner’s notification and have amended claim 16 to provide said antecedent basis. Thus, it is submitted that claim 16 now stands in formal condition for allowance.

Claim Rejections – 35USC § 102(b)

Claims 6-10, 12-21, 36-40, and 42-46 stand rejected under 35 U.S.C 102(b) as being anticipated by Freeman ‘174 (cited by Applicants). This rejection is respectfully traversed.

The Freeman ‘174 reference is wholly different from the present device and does not have the same function as Applicants’ device. The Applicants’ device is designed to reduce surge pressure while running the tool downhole. This reduction is achieved with the large bottom opening of the Applicants’ device. In contrast, cementing baskets, such as disclosed by Freeman ‘174, can become quite unstable because of surge pressures. In wells, particularly where close diametrical clearances exist, this instability can cause severe downhole problems in that the cement basket can jam and then the entire casing string can get stuck.

The examiner points out that Freeman’174 discloses a series of “outer” tubular members 26, 40 and “inner” tubular members 140, 120. In this view, tubular member 160 must also be an “outer” tubular member since it is outside of “outer” member 40. Further, the examiner states that the “inner” tubular member moves from a first position to a second position. However, Applicants respectfully point out that Freeman teaches a three position movement. Namely, the first position (Fig. 1) is the running position. The second position (Fig. 2) is to move the “inner”

members downhole such that “outer” tubular member 160 pushes inner sleeve 172 to shear pin 174 and deploy the cement basket. The third position (Fig. 3) is to move the “inner” tubular 140 below the valve. Tubular member 160 must be activated by “inner” tubular member 140 to open the cement basket. Thus, Freeman discloses a complex operation that requires the shearing of two different elements 174 and 150 at two different times. Freeman also teaches that a series of “inner” and “outer” tubular members are required. The Applicants’ device consists of an outer tubular wherein the inner tubular is substantially within that outer tubular. Applicants also do not have a cement basket and further do not have such a complicated structure which is inherently more unreliable. As per amended claim 6, it is clarified that the outer tubular member is stationary with respect to the inner tubular member and the inner tubular member is substantially within the outer tubular member. Further, the Applicants’ inner tubular member only moves from a first position to a second position to uncover the valve and without movement of the outer tubular member.

As discussed above, Freeman teaches a three position method for moving the “inner” and “outer” tubulars. Therefore, Applicants submit that Freeman in no way suggests that only a two position movement can successfully implement the device taught by Freeman. Thus, Freeman does not teach that a passageway can be opened or a valve uncovered for fluid flow by moving an “inner” tubular from a first position to a second position. Freeman specifically requires that passages 48 be blocked when deploying the cement basket (i.e. when moving the “inner” tubular from the first position to the second position).

The Applicants further respectfully submit that Freeman ‘174 does not disclose, teach, nor even suggest the use of up jets or down jets. Passage 48 is not an up jet. Freeman specifically teaches that passage 48 must have a diameter sufficient to allow a calculated drop to release the

cement basket staves 178 (*See* Col. 4, Lines 28-33). Therefore, Freeman could not have been suggesting any orientation, for passages 48, other than one substantially perpendicular to the longitudinal axis of the tubular members. Otherwise, the passage diameter would have to be very large to provide for the necessary longitudinal movement within passage 48. Further, Applicants previously amended claim 13 to specify that Applicants' up jets are for directing pumped cement in an up hole direction. Applicants respectfully submit that Freeman's device teaches away from facing passage 48 upward and thus directing cement in the uphole direction.

Regarding the examiner's assertion that Freeman teaches a down jet, Freeman specifically only discloses a single bottom orifice 64. Freeman in no way teaches or suggests that this orifice is a down jet. In Column 6, line 8, Freeman discloses that orifice 64 is for controlling the fluid entering from the borehole. Therefore, it can not be a jet which is for **expelling** fluid into the borehole. Further, such an orifice 64 is likely to get bridged by the cuttings and other debris, in the borehole, and has a propensity to eventually clog and defeat the "fill up" feature of a "fill-up" device. As per amended claim 6 and as illustrated in the drawings, Applicants' bottom end is open and not restricted in the way taught by Freeman.

Further, the Freeman seat 132 and drop member do not operate in the same manner as the Applicants' device. In fact neither Freeman nor any of the cited prior art discloses the particular mounting of the drop member adjacent to the moveable member as per claim 17. Instead Freeman teaches that the drop ball is dropped from the surface. The Freeman drop member is not mounted as adjacent to the moveable member as per Applicants' claim 17. Freeman teaches that the drop member 200 is dropped, from the surface, **after** the casing string has been lowered to a desired depth (Col. 4, lines 18-23). Per claim 17, the Applicants' drop ball can be mounted in the assembly and lowered with the assembly. This is to allow the use of a larger diameter ball

which may not be able to be passed through any restriction in the tubing uphole of the Applicants' device. The use and placement of the drop member is not taught, disclosed, nor even contemplated by Freeman.

With respect to claims 19-21, Freeman does not teach or disclose sealing off valve 104. As per previously amended claims 6 and 19, the Applicants' inner tubular member does not permit fluid flow, and thus debris and cuttings, from damaging the valves or valve seats. Although Freeman Figs. 1 and 2, seem to show that inner tubular member 104 could shield valve 104 and seat 94, this is not contemplated by Freeman as there is no disclosure or teaching that the valve and valve seat require any protection. Therefore, Freeman in no way anticipates a need for such protection and cannot anticipate the Applicants' design for such protection.

Regarding claims 36-40 and 42-46, the above discussion also applies. Particularly, Freeman teaches a wholly different concept regarding the inner and outer tubular members. Claim 36 was previously amended to clarify that the inner moveable member is moveable only one time from the first position to the second position. The moveable member does not move to a third position to uncover the one or more valves or to selectively open or close apertures nor does the outer member move, with respect to the inner member as taught by Freeman. As respectfully pointed out herein, Freeman does not disclose a down jet but only an orifice controlled bottom opening for the flow of fluid from the wellbore into the tubing. Further, claim 43 has been amended to clarify that the Applicants' outer tubular member is open at the lower end to allow fluid flow into the bore or out of the bore. Still further, per previously amended claim 40, the Applicants' one or more down jets can be used to control fluid for washing the bore while lowering the tubing string. Freeman's lower orifice controlled opening was not contemplated for washing since Freeman teaches that the opening 64 is for controlling the "fill"

of the tubing or casing string (Col. 4, lines 13-17). Therefore, Applicant's respectfully submit that the rejections for claims 6-10, 12-21, 36-40, and 42-46 have been overcome and that these claims once again stand in formal condition for allowance.

#### Allowable Subject Matter

Applicants note with appreciation the allowance of claims 47-67 and the conditional allowance of claims 22-25 with the correction of the objected to informality in claim 22. As claim 22 has been amended herein, it is thus submitted that claims 22-25 now stand in formal condition for allowance. Applicants also note with appreciation the indication of patentability of claim 11 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants believe that the rejection to claim 6 has been overcome above. Since claim 6 is believed to be in formal condition for allowance, this should also overcome the objection to claim 11 as being dependent upon a rejected claim. Therefore, Applicants respectfully submit that claim 11 now stands in formal condition for allowance without any further revision.

#### Other Amendments

Claims 68-70 were added to clarify previously existing claims and are not an attempt to introduce new matter. Applicants respectfully believe that these new claims are not the subject matter of any objections or rejections by the examiner in this or any previous office action. Therefore, Applicants respectfully submit that claims 68-70 stand in formal condition for allowance. Claim 65 was amended only to clarify that the inner tubular has an outer diameter that will allow the inner tubular to extend through the plurality of flapper valves. Applicants' are of the belief that this amendment does not affect the allowability of claim 65.

#### Information Disclosure Statement

Under separate cover, Applicants are disclosing information that may be "material" pursuant to 37 C.F.R. § 1.56. However this disclosure is not intended to constitute an admission that this other information or any patent or publication referred to therein is "prior art" for this invention.

The disclosed information, a drawing, is identified as Assembly for Flapper Valve Insert for Sub-Sea Re-entry Cement Float Shoe with TV Camera for XO-07238, Baker Drawing Number 02-35733-00, Dated January 23, 1976, and shows a device with dual flapper valves. It is not known by the Applicants whether this device was ever publically disclosed, sold, manufactured or used.

Applicants respectfully submit that this reference is not analogous art. Notwithstanding the similarity of containing dual flapper valves, this reference does not teach, disclose, suggest or even contemplate the Applicants' device. As respectfully pointed out herein above, the Applicants' device is used for reducing surge pressures while running tubulars downhole. The cited device is for allowing the use of a television camera to guide casing into a wellbore located on the ocean floor in deepwater applications. Any potential use of this tool did not contemplate the problems of surge pressure nor did it contemplate the need to seal off the valves and seats from cuttings and other debris encountered during run-in operations. If used, after the cited device reaches the ocean floor and the wellbore, the television camera would be removed. A drop member would subsequently be dropped to push out the pumpout sleeve and activate the flapper valves. The equipment would then be lowered into the wellbore. Typically, a cement float shoe would be attached downhole of the cited device or the cited device would be inside of the float shoe or float collar. Thus, in this configuration there would be no flow of wellbore fluids into the tubular string through the cited device as the flapper valves are closed prior to or

just after the tubular string first enters the wellbore. In fact, at the time the cited device was contemplated, the practice in this field, was to pump fluids into the tubulars, being run downhole, from the surface and not utilize the current art fill-up technology. Therefore, the function of this device, **after** the television camera was removed and after the flappers are closed, was to prevent any flow of wellbore fluids into the tubular string; therefore preventing the auto-fill operation and thus providing **no** surge reduction capability.

In addition, the television camera was to be utilized primarily with large bore casing. Further, if the television camera was not utilized, the cited device would not be necessary. Thus, this cited device could not teach, disclose, nor suggest the Applicants' device as this reference did not recognize the problem nor the issue of preventing/controlling surge pressures which the Applicants' device seeks to resolve.

Notwithstanding the above, should the examiner further believe that the cited art in any way discloses, anticipates or makes the Applicants' device obvious, the Applicants respectfully further submit the following.

The cited device does not have an open lower end which opens into the wellbore to permit flow of fluid into the bore as per claims 6 and 43. The cited device has no up jet and therefore cannot selectively block such an up jet while the inner tubular is in the first position nor open such up jet when the inner tubular is in a second position as per claims 13, 14, 15, 16, and 36. Further, this device does not have a drop member mounted adjacent to the moveable inner tubular as per claim 17. As per amended claim 19, the cited device does not have a moveable member which will block the bottom opening when in the second position. The cited device cannot prevent cement flow through the bottom opening by selectively blocking such opening as per claims 22 and 36 and amended claim 19. In fact, Applicants respectfully point

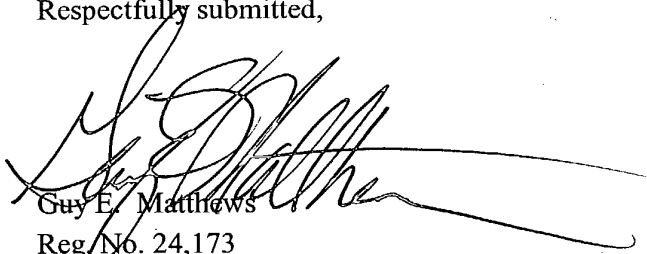


out to the examiner that any cement flow pumped through the tubular string, as is normal cementing practice, will immediately open both flapper valves and permit cement flow therethrough in contradiction to the claim language. The cited device has no up jet and therefore cannot direct cement flow through such up jet as per claim 40. The cited device has no first and second jets formed in the tubular string as per claim 43. Because the cited device does not contemplate use as an auto-fill device, it cannot be selectively operable between an auto-fill mode and a back pressure mode as per claim 47. Further, because the cited device does not contemplate use as an auto-fill device, it does not teach, suggest, nor disclose allowing wellbore fluid to flow inwardly from the wellbore into the tubular string.

#### Conclusion

In light of the above discussion, Applicants respectfully submit that the application now stands in formal condition for allowance and respectfully ask for this application be advanced to issue. Although Applicants' believe that no additional fees are required, the Commissioner is hereby respectfully authorized to deduct such fees from Deposit Account Number 13-2166.

Respectfully submitted,

  
Guy E. Matthews  
Reg. No. 24,173

Date: 7/29/03  
The Matthews Firm  
1900 West Loop South, Suite 1800  
Houston, TX 77027-3214  
(713) 355-4200 - Telephone  
(713) 355-9689 - Facsimile